Summary point and directions for work

- Injector main line: 5 GeV copper linac with recirculation (ring+injector->$255mln.). Design has been developed.

  BNL needs the dimensions to check on-site fit for the whole electron system (ring+injector). 12o'clock or 2o'clock IR.

  Output beam parameters.
- FFAG as injector. Very basic design has been developed.

  Further development as well as more precise cost estimate is needed. May go to the ZDR Appendix.
- The lattice has been developed and released (v1.0) on FODO cell basis. Reasonable balance between SR power loss and polarization time. SR power accommodation does not look like R&D question now (at the level of present SLAC B-factory).

  Dynamic aperture, collective effects, beam-beam evaluation.
- eRing circumference control. Not easy but several solutions has been suggested.

  Final solution choice and the lattice update.

- Interaction region design. No complete solution yet. Two design lines (with and without crossing angle). Fighting different problems: either SR produced background (without crossing angle) or crab cavities+other problems (with crossing angle).

  Continue design optimization (assymetric design?). Background evaluation.

- Second crossing problem. The best solution to direct crossing through warm ion ring space.

  Consider corresponding changes in the electron ring lattice.

- Electron polarization with round beams.

  More polarization simulations needed with round beams and misalignments. Good to have the experiment in Bates to test the round beam polarization.

- Flat beams have some advantages for IR design and polarization.

  More conclusions needed about luminosity, beta*,emittances.

- Spin rotators for protons-> existing helical design is able to provide the longitudinal polarization with modified eRHIC IR.
- Polarized ^{3}He->rotators and snakes at lower field.

  Large number of spin resonances->spin simulations are required.
- Getting 360 bunches in ion rings. 3 ways suggested for ZDR. The life will define the best of them.

  Expecting improvement with pressure rise/electron cloud and long range beam-beam effects in RHIC as time goes.
- Technical question for ZDR: SR power accommodation, RF system.

  Similar to SLAC B-factory?